AMENDMENTS TO DRAWINGS:

Please add Figs. 6 and 7, enclosed with this Response, to the application. These Figures correspond to Figures 3 and 4 from Application Serial Number 10/666,063, which was incorporated by reference into the present application.

REMARKS

Claims 1-28 are pending in this application. Claims 1, 9, 13, 19, 21, and 24 have been amended to further define the invention. Figs. 6 and 7 have been added, and the specification has been amended as a result of the addition of these figures. No new matter has been added.

Added Figs. 6 and 7 correspond to Figs. 3 and 4 respectively of Application Serial No. 10/666,063, which was incorporated by reference into the present application. The description of these figures added to the specification is from the application that was incorporated by reference. As a result, the addition of Figs. 6 and 7 and the corresponding description add no new matter. Moreover, claims 17 and 18 are fully supported by the disclosure.

Turning now to the art rejections, applicants respectfully request reconsideration of the rejection of claims 1-3, 5-7, 9-11, 19, 23-26, and 28 under 35 U.S.C. § 102 as being anticipated by U.S. Patent Application No. 6,819,330 to MacInnis et al. (MacInnis) in light of the amendments and arguments presented below.

The Examiner asserts that MacInnis discloses all of the features of independent claim 1. Claim 1, as amended, includes the feature of receiving video display data into a resizer, the video display data having a color format associated with a first sub-sampling scheme; adjusting a size associated with the video display data through the resizer; and compressing the size adjusted video display data through a second sub-sampling scheme, among other features. These features are not taught or disclosed by MacInnis. MacInnis discloses a graphics integrated circuit chip that is used in a set top box for controlling a television display (see abstract). MacInnis takes an analog signal, digitizes the signal and then may encode the data for display in a number of formats. The decoder of the integrated circuit of MacInnis may also receive a digital signal in the YUV format (see Figure 2, column 4, lines 16-30). The video decoder 50 converts an analog video signal to a digital video signal. Because the input analog data may not be synchronized to the resulting display data and because the input analog data may not be standard video signals, a synchronization

scheme is needed to synchronize all the signals so that jitter and artifacting do not occur on the display. For example, analog data from a VCR may have synchronization signals not aligned with chroma reference signals and may also have inconsistent line periods (see column 32, lines 52-67). The chroma and line locked SRCs of Figure 18 achieve this synchronization. The analog signal is sampled at a high frequency by the video decoder to ensure that all types of incoming analog signals can be captured. The synchronization circuit first passes the digitized data through a chroma locked sample rate converter, separates the chroma and luma data, and then passes the separated chroma and luma data through a line sample rate converter.

Claim 1, as amended, receives the data into a resizer, adjusts the size of the data, and then further compresses the size-adjusted data. MacInnis does not teach or disclose these features. The data in MacInnis proceeds through the video decoder and the sample rate converters in order to be synchronized. The data in MacInnis is incapable of being size adjusted and then sub-sampled, as that would render the synchronization circuitry disclosed in Figure 5 useless. As specified in claim 7, the first sub-sampling scheme is a 4:2:2 sub-sampling scheme and the second sub-sampling scheme is one of a 4:1:1 sub-sampling scheme and a 4:2:0 sub-sampling scheme. MacInnis performs the sub-sampling associated with Figure 18 according to a frequency for synchronization purposes. That is, the frequency of the higher rate calls for sampling at a rate higher than 13.5 MHz to guarantee correctly capturing all forms of video data. The synchronization circuit then samples the data at 13.5 MHz, which the frequency associated with the display panel (see column 33, lines 8-31). Claim 7 specifies that the sub-sampling is performed according to the YUV compression schemes that discards data to conserve memory. Sub-sampling according to the YUV compression scheme and sampling at a lower frequency are unrelated and the Applicants respectfully request that the Examiner specify how sampling according to a frequency anticipates compression according to the YUV standard if this rejection is maintained.

In rejecting claim 1, the Examiner points to converter 138, which converts data from YUV-444 to YUV-422. Converter 138 is located within the display

engine 58 (see Figure 5) and has nothing to do with the video decoder 50. The converter 138 cannot be used in the synchronization circuit of the video decoder 50 as the synchronization scheme would be rendered useless. Therefore, the order of relationship of the features of claim 1 and the additional features of claim 7 are not anticipated by MacInnis. Claims 2, 5, and 6 depend from claim 1 and are not anticipated by MacInnis for at least the above stated reasons.

Claim 9, as amended, includes the features of program instructions for receiving video display data having a color format associated with a first sub-sampling scheme into a resizer, the first sub-sampling scheme being a 4:2:2 compression scheme; program instructions for adjusting a size associated with the video display data through the resizer; and program instructions for compressing the size adjusted video display data through a second sub-sampling scheme. Applicants respectfully submit that the minor and unrelated reference to a 4:2:2 sampling scheme in MacInnis does not disclose the features specified in amended claim 9 and the specified order of the features as mentioned above with reference to claim 1. Furthermore, MacInnis never discloses switching between YUV compression standards within the video decoder. As a matter of fact the video decoder requires that the compression standard not switch in the decoder since the synchronization scheme is unable to accommodate switching between standards. The Examiner asserts that this unrelated reference implies that the second sub-sampling is a 4:2:0 sub-sampling scheme. Applicants respectfully request that the Examiner elaborate on how the synchronization scheme will adapt to handle this implication and the basis for this implication, if this rejection is maintained. Claim 10 depends from claim 9 and is not anticipated by MacInnis for at least these reasons.

Claim 19, as amended, includes the features of the conversion module receiving size adjusted output from the resizer block to be compressed; and a color space conversion block configured to convert the compressed digital video data from the YUV color format to an RGB color format, among other features. MacInnis fails to disclose or teach these features. As mentioned above, MacInnis cannot be modified to receive the size adjusted output from the resizer as this would render the synchronization scheme useless. Each of claims 20-23 depends

directly or indirectly from claim 19 and is patentable for at least these reasons. Moreover, US Patent Publication No. 2002/0057265 to Tamura, which has been used in combination with MacInnis under 35 U.S.C. § 103 to reject claims 20-22, does not offset the deficiencies in MacInnis.

Claim 24, as amended, includes the features of circuitry for adjusting a display size of the previously compressed digital video data prior to further compression; and circuitry for sub-sampling the size adjusted previously compressed digital video data. MacInnis fails to disclose or teach these features. As mentioned above, MacInnis fails to teach or disclose these features. Claims 26 and 28 depend from claim 24 and are not anticipated by MacInnis for at least these reasons.

Claims 4, 8, and 12 were rejected under 35 U.S.C. § 103 as being unpatentable over MacInnis in view of US Patent No. 5,341,318 to Balkanski et al (Balkanski). In light of the amendments to claims 1 and 9, from which claims 4 and 8, and 12, respectively depend, Applicants request withdrawal of this rejection, as Balkanski fails to cure the deficiencies of MacInnis.

Claims 13, 15, 16, 21, and 27 were rejected under 35 U.S.C. § 103 as being unpatentable over MacInnis in view of US Patent No. 6,297,801 to Jiang (Jiang). Claim 13 has been amended to include the feature of a conversion module configured to compress the size adjusted digital video data defined through the YUV color format from the resizer. As discussed above, MacInnis fails to disclose this feature and cannot be modified as amended due to the synchronization scheme. Jiang does nothing to cure this deficiency. Claims 15 and 16 depend form claim 13 and are allowable for at least these reasons. Claim 21 has been amended and is allowable over the combination of MacInnis and Jiang in light of this amendment, as well as the reasons listed above with respect to amended claim 19. Claim 27 depends from claim 24 and is allowable over the combination of MacInnis and Jiang in light of the amendment to claim 24.

Claim 14 was rejected under 35 U.S.C. § 103 as being unpatentable over MacInnis in view of Jiang further in view of Balkanski. For the reasons cited above with regard to claim 13, as amended, MacInnis fails to disclose the above

stated features and cannot be modified as specified in amended claim 13 due to the synchronization scheme. Jiang and Balkanski fail to cure the deficiencies of MacInnis. Applicants would like to point out that claims 17 and 18 are fully supported by Figures 6 and 7 and the corresponding text added to the specification by this amendment. Applicants submit that none of the cited references teach or disclose any of the features of claims 17 or 18. Accordingly, claims 17 and 18 are allowable over any of the cited references for at least these reasons.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration of the present application. In the event a telephone conversation would expedite the prosecution of this application, the Examiner may reach the undersigned at **(408) 952-6126**.

Respectfully submitted,

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